Application No.: 10/507,041

Response to Office Action of October 6, 2005

Attorney Docket: NOTAR-010US

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

- 1. (Currently Amended) A [[C]]ceramic colorant[[s]] in the form of a suspension[[s of]], the colorant comprising particles of colorant [[have]] having nanometric dimensions in which the solvent of the suspension is a high-boiling alcohol selected from the group consisting of diethylene glycol, ethylene glycol, and polyethylene glycol, and wherein the suspension includes an appropriate amount of water to facilitate hydrolysis.
- 2. (Currently Amended) The ceramic colorant[[s]] according to Claim 1, in which the particles have dimensions diameters of between 5 nm and 600 nm.
 - 3. (Cancelled)
- 4. (Currently Amended) The colorant[[s]] according to Claim 1, in which the nanometric particles are chosen in the group consisting of:

 $M^{II}M^{III}_2O_4$, where M^{II} is chosen in the group consisting of Fe^{II} , Zn, Co, Ni, Mn, and M^{III} is chosen in the group consisting of Fe^{III} , Al, Cr, Mn, $CoAl_2O_4$, $Ti(Sb,Cr)O_2$ $TiSbO_2$, $TiCrO_2$, $(Zr,Pr)SiO_4$ $ZrSiO_4$, $PrSiO_4$, $(Zr,V)SiO_4$ $ZrSiO_4$, $VSiO_4$, $(AlCr)_2O_3$, $(Al,Cr)MO_3$ $AlMO_3$ (where M=Y, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb), $CrMO_3$ (where M=Y, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb), $CaSn_{1-x}Cr_xSiO_5$, $Ti(Sb,Ni)O_2$ $TiSbO_2$, $TiNiO_2$, $(Zr,V)O_2$ ZrO_2 , VO_2 , $(Sn,V)O_2$ SnO_2 , VO_2 , $Sn_{1-x}Cr_xO_{3-x/2}$ (where x is comprised between 0.01 and 0.1), Au^0 , Ag^0 , Cu^0 .

- 5. (Currently Amended) A process for the preparation of ceramic colorants according to Claim 1, in which, the process comprising the steps of:
 - [[- to]] <u>adding salts of desired metals to</u> a known volume of alcohol <u>to form a solution</u> there are added the salts of the desired metals, and;

heating under stirring the solution is then heated under stirring up to complete solubilization of the salts[[.]];

[[-]] <u>adding an appropriate amount of</u> water is <u>added in appropriate amounts</u> for facilitating hydrolysis of the salts[[, and]];

heating the solution is heated up to a temperature higher than 150°C[[.]] for furthering the hydrolysis and to form a suspension;

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[[-]] <u>cooling the suspension to room temperature</u> once the <u>hydrolysis</u> reaction is completed, the suspension that has formed is left to cool to room temperature,;

- [[-]] <u>utilizing one of dialysis and ultrafiltration to perform at least one of eliminating the salts and replacing the solvent the suspension thus obtained is subjected to dialysis or ultrafiltration to eliminate the salts and/or to replace the solvent;</u>
- [[-]] <u>centrifuging possibly</u> the suspension is <u>centrifuged</u>, and <u>to form a precipitate</u> the precipitate is collected and dried.
- 6. (Currently Amended) The process of Claim 5 for the preparation of ceramic colorants according to Claim 1, in which further including the steps of:

adding there are rapidly added the reagents (solutions of salts of metals) to a polar solvent previously brought to the desired temperature of hydrolysis[[, and]];

then the suspension is brought <u>bringing the suspension</u> to room temperature[[,]]; and

<u>dehydrating</u> the reaction environment is dehydrated with dehydrating agents, then proceeding as specified in Claim 5.

- 7. (Currently Amended) The process of Claim 5 further including the steps of for the preparation of ceramic colorants according to Claim 1, in which:
 - [[-]] <u>dissolving</u> the salts are <u>dissolved</u> in the high-boiling alcohol at an adequate temperature;
 - [[-]] <u>adding</u> an unmixable solvent is <u>added</u> to the high-boiling alcohol to form an emulsion of micelles of nanometric dimensions;
 - [[-]] adding the necessary an appropriate amount of water is added to the suspension under stirring to facilitate hydrolysis, allowing it to react at a temperature higher than 120°C; and
 - [[-]] <u>cooling the suspension</u> it is then left to cool to room temperature, then proceeding as specified in Claim 5.
 - 8. (Canceled)
 - 9. (Canceled)
 - 10. (Canceled)

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- 11. (Canceled)
- 12. (New) The process of Claim 5 further including the step of collecting and drying the precipitate to obtain the colorant in the form of a powder.
- 13. (New) The colorant prepared by the process of Claim 12 wherein the colorant is in the form of powder.